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The Quality of Life and Risk Behavior of Teenagers in the Mirror of the ESPAD Data

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Abstract

The quality of life may be threatened by various health risk factors, among those most serious is the risk behavior and substance use. In the Czech Republic, the transition period brought changes in the life style and behaviour, including higher alcohol consumption, drug use, and cigarette smoking which become a substantial problem among young people. This paper aims to reveal the trends of risk behaviour influencing the quality of life of young people based on the statistical analysis of the comparative data from the European School Project on Alcohol and Other Drugs (ESPAD).

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1. Introduction

The quality of life becomes a central issue for the health care professionals and policy makers. The quality of life may be threatened by various health risk factors, among those most serious are the risk behavior and substance use. In the Czech Republic and other post-communist countries of Central and Eastern Europe, the political changes during the transition period brought changes in the life style and

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behaviors of many citizens, including higher alcohol consumption, drug use, and cigarette smoking. Alcohol drinking, smoking, and substance use are a substantial problem among young people as well as changes of leisure time occupations, value orientations etc. (Džúrová, Spilková, Pikhart 2010; Spilková, Džúrová, Pikhart 2011; Elkind 2001).

This paper aims to reveal the trends of risk behavior influencing the quality of life of young people based on the statistical analysis of the comparative data. Several representative studies using standard survey instruments were carried out across Europe to provide comparative individual-level evidence of alcohol, tobacco, and drug use in the populations. The European School Project on Alcohol and Other Drugs (ESPAD) in particular became one of the most effective sources of information about youth life styles and risk behavior during the last 15 years. This project attempts to collect comparable data on alcohol, tobacco, and drug use among 15-16-year old students. Countries cooperate to collect data using a strictly standardized methodology. Data is collected by group-administered questionnaires.

The students answered the questionnaires anonymously in the classroom with teachers or research assistants. The target population was very differently distributed over school types and grades in different countries participating in the survey.

Examining the brochure of the ESPAD 2007 survey, it is obvious that the Czech teenagers scored above the ESPAD average on six of the nine variables presented in the report. As the country report state, "almost all (93%) students in the Czech Republic had been drinking alcohol during the past 12 months and about half of them (48%) had been drunk during the same period" (ESPAD 2007, p. 103). No matter that the students have not consumed big volumes of alcohol, still they were placed slightly above the average. Smoking is also a big problem among the Czech students, when 41 percent of the students reported smoking during the past 30 days. The use of pills in combination with alcohol was evidenced three times as frequent among The Czech students (18%) as the ESPAD average (ESPAD 2007, p. 103).

This paper introduces the results of the ESPAD data analysis in the last three waves of the survey existence - thus 1999 (N=3 579), 2003 (N=3 172) and 2007 (N=3 901). First, we focus on trends and development of risk behavior tendencies among the young people in Czechia, then we turn to the psychosocial characteristics available in later waves of the ESPAD survey. The association between the quality of life, expressed by satisfaction with relations with mother, father or friends, and the risk health behavior is investigated in the next session of the paper. The paper aims to show a possible relation between family environment as selected proxy for quality of life and risk health behavior in teenagers. In the conclusion, we stress the need of a complex strategy of prevention aimed at the whole quality of life and all its aspects of young people.

2. Risk Behavior of the Czech Students and its Tendencies

Smoking is among the major mortality risk factors in general, causing not only lung cancer, but also other diseases closely related to smoking, such as atherosclerosis, coronary artery disease, myocardial infarction etc. Several studies (Sovinová, Sadílek, Csémy 2008, 2010) show that despite the efforts of various anti-smoking measures, preventive actions and new legislation on the tobacco products and smoking in public, the prevalence of smoking over the last decade stays at some 30 %. Nevertheless, what consists a more alarming fact, is the high smoking prevalence among young people and teenagers. This is supported by weak legislation enforcement, for example, in the 2007, almost 59 % of students answered that it was very easy to buy cigarettes and another 30 % replied that obtaining a package of cigarettes was fairly easy. In this measure, only Denmark scored worse than Czechia. Children and teenagers are also daily exposed to tobacco advertising. Last, but not the least, they are confronted with the risk behavior of their parents who set the first and strongest example (Spilková, Džúrová, Pikhart 2011).

The figure 1 depicts the evolution of trends in smoking during last 30 days as reported by students in the ESPAD questionnaires. It can be seen that the proportion of students who have not smoked at all during the last month has increased slightly between 1999 and 2007 (from 55, 4 % to 59, 3 %). The proportion in other categories has been decreasing slightly during this period. However, the percentage of students in the most risk group, thus those smoking more than 20 cigarettes a day, remains stable over the surveyed years.

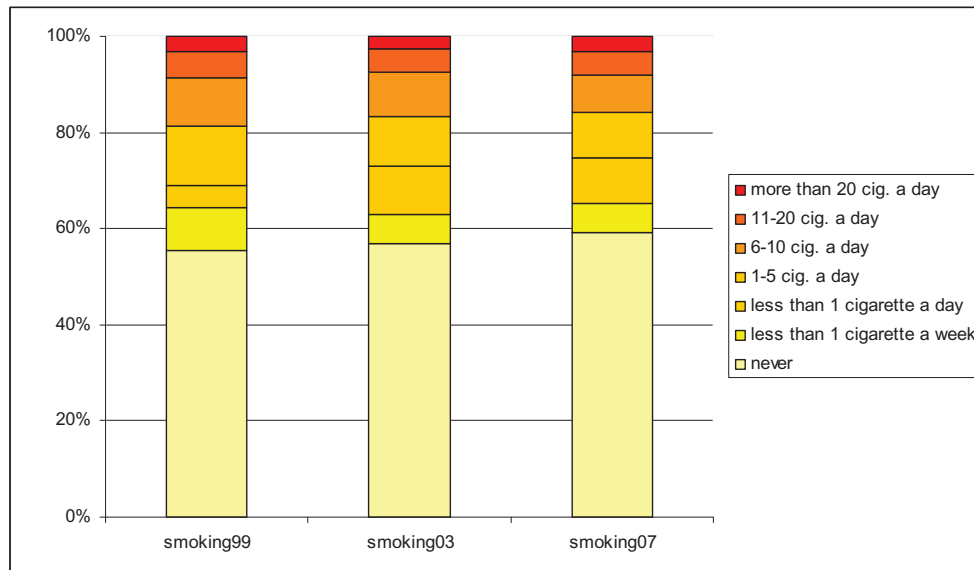


Figure 1: Smoking during the last 30 days in 1999, 2003 and 2007 ESPAD survey. Source: ESPAD 1999, 2003 and 2007.

When it comes to alcohol consumption, Czechia is known as the country with the highest levels of alcohol consumption per capita worldwide. Beer and drinking alcohol are perceived an important part of Czech culture, society and history, and the beer industry is seen as part of the national heritage. Especially during the last 20 years following the political changes in the Central and Eastern Europe, the alcohol consumption has increased. More, the increase has been most significant among women and among young people. Despite certain success of prevention strategies and policies aimed at reduction of the risk drinking and some restrictions on advertising, as well as higher taxation of alcoholic beverages, there are still almost one quarter of men and lesser, but increasing, percentage of women who are considered to be alcohol dependent (Dzúrová, Spilková, Pikhart 2010).

Again, the situation of alcohol use in young people is well reflected in the ESPAD surveys. In the last wave of the ESPAD survey, Czech students were those who scored at the first place in the alcohol consumption during the last 12 months, and second place (after Austria) in the consumption during the last 30 days (for detail see The 2007 ESPAD Report). 48 % of students reported having been drunk during the last 12 months and other 20 % of them during the last 30 days. More than a half of the students in 2007 reported having drunk more than five drinks on one occasion during the last 30 days. Figure 2 presents the trends in alcohol consumption of Czech students and the differences between particular beverages.

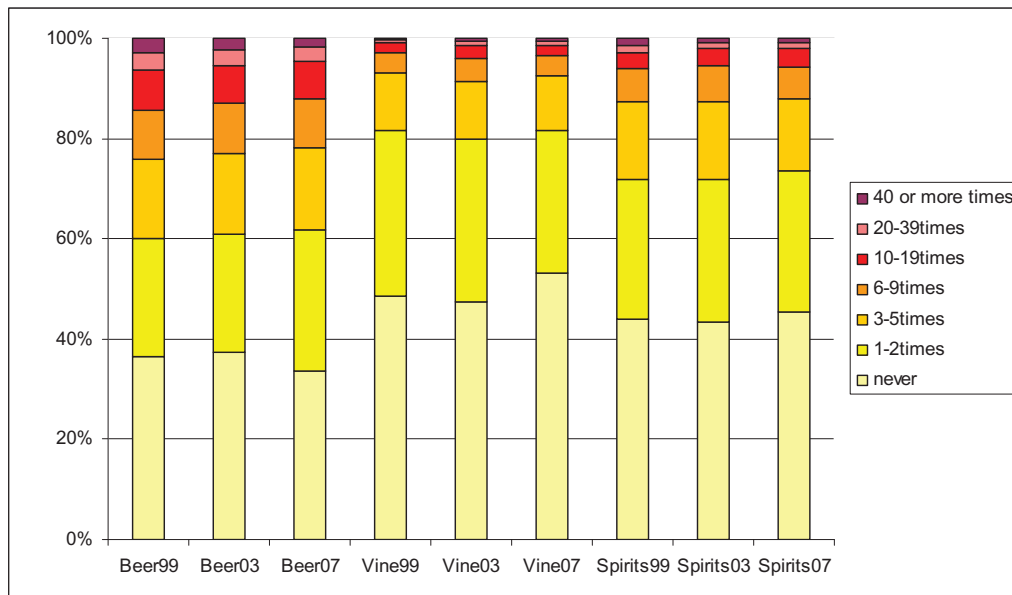


Figure 2: Alcohol consumption during the last 30 days in 1999, 2003 and 2007 ESPAD survey. Source: ESPAD 1999, 2003 and 2007.

The "inborn" perception of beer as Czech national beverage and cultural denominator is well reflected in the data and trends. The proportion of students who have not been drinking beer during the last 30 days decreased. On the other hand, the students consuming beer once or two times and three to five times in the last month has been slightly increasing. More frequent consumption of beer showed small decreases over the surveyed years. The consumption of the vine is decreasing in the selected years for all the mentioned categories, however, again only very little. The situation of spirits' consumption reveals mixed results with increasing number of students not consuming spirits at all (43, 3 % in 1999 to 45, 1 % in 2007). The availability of alcohol is appraised similarly to the accessibility of cigarettes, thus 52, 4 % of students find it very easy to buy beer and next 32, 8 % state that it is fairly easy to obtain beer. As concerned the vine availability, the percentage is slightly lower (46 %, 29,6 %) and it seem to be the most complicated to buy spirits (27, 9 %, 27, 2 %).

3. Quality of Life

The quality of life becomes a central issue for the health care professionals and policy makers. It is extremely important to examine the quality of life in teenagers and young people, since their mental and psychosocial development implies the future condition of the whole society. The later waves of the ESPAD questionnaire reflected also on the quality of life of respondents and included the so called psychosocial module including questions related with self-esteem, depressive moods, anomie, antisocial behavior, running away from home and harming or even suicidal tendencies.

The quality of life can be characterized by many different measures and tools (see for example Paz et al. 2009). The vast majority of them include some kind of scale or measure, like social functioning or role limitations due to emotional problems (e.g. SF-36), emotional quality of life (MLHFQ), physical activity and social activity/role expectations (as in QWB-SA) etc. (Paz et al. 2009). The association between family environment and poor health behaviors or substance abuse were uncovered by many studies

(Hawkins, Catalano, Miller 1992; Repetti, Taylor, Seeman 2002 etc.). Family relations and relations to peers in general can, therefore, be used as one of potential proxies of quality of life in teenagers in this paper. As the risk behavior is to a higher extent influenced by the family environment and primary examples set by parents of the particular student, we first analyzed the question on the mutual relations with parents and friends as perceived by the students (see figure 3).

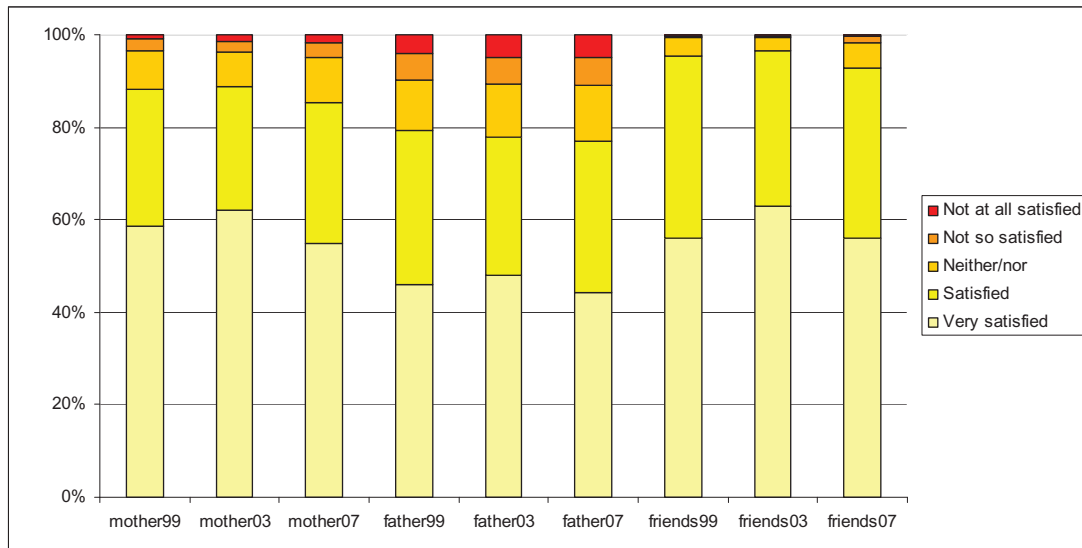


Figure 3: Perceived relations with mother, father and friends in 1999, 2003 and 2007 ESPAD survey. Source: ESPAD 1999, 2003 and 2007.

From the figure 3, we can see that the satisfaction with relations to mothers tend to be in general higher than the satisfaction with relation to fathers. However, even when mothers seem to be better companions to surveyed students, in all the three waves of the survey we examined, the relation with friends is more satisfactory than the relation with parents. This is especially true for the category very satisfied and satisfied. The proportions of students having ambivalent relations with parents remain almost stable during the selected years. The proportion of those having such relations with friends is only slightly increasing. There is also a small increase in the percentage of students not so satisfied with their friends, which could signalize beginning of losing the bonds event with the peers. There is also a striking increase in the non-satisfaction with both parents during the three surveyed years depicting certain drop in the family bonds importance.

A logistic regression was conducted for the two models of risk behavior for the last available data of ESPAD study in the 2007 (table 1). In the first model, the dependent variable was set as binary (1 - smoking of 11 or more cigarettes daily and 0 - smoking less or no smoking) and in the second model the dependent variable was based on the occurrence of binge drinking (1 - consuming more than five drinks on a single occasion and 0 - drinking less). As the independent variables entering the regression, the three variables depicting the satisfaction with relation with mother, father and friends were used.

Table 1: Adjusted odds ratios (OR) and 95 percent confidence intervals (CI) for satisfaction with relation with mother, father and friends (adjusted odds ratio)

	Dependent variable: Binge drinking = 1, without binge drinking = 0			Dependent variable: Strong smoking = 1, without binge drinking = 0		
	Exp(B)	95, 0% C.I. for EXP(B)		Exp(B)	95, 0% C.I. for EXP(B)	
		Lower	Upper		Lower	Upper
Mother						
Very satisfied	1			1		
Satisfied	1,398	1,118	1,747	1,380	0,988	1,927
Neither/nor	1,472	1,088	1,992	1,673	1,098	2,549
Not so satisfied	1,992	1,283	3,093	1,608	0,864	2,991
Not at all satisfied	1,548	0,877	2,730	2,597	1,361	4,957
Without such person	2,274	1,006	5,139	3,335	1,327	8,379
Father						
Very satisfied	1			1		
Satisfied	1,179	0,933	1,490	0,773	0,536	1,115
Neither/nor	1,285	0,958	1,723	1,125	0,732	1,729
Not so satisfied	1,457	1,016	2,090	2,066	1,307	3,265
Not at all satisfied	1,776	1,236	2,552	2,247	1,418	3,562
Without such person	1,163	0,720	1,880	2,467	1,444	4,213
Friends						
Very satisfied	1			1		
Satisfied	0,697	0,582	0,833	0,737	0,566	0,961
Neither/nor	0,308	0,191	0,498	0,487	0,263	0,902
Not so satisfied	0,393	0,164	0,941	0,151	0,021	1,113
Not at all satisfied	0,681	0,181	2,563	1,455	0,371	5,709
Without such person	0,587	0,064	5,349	3,341	0,502	22,221

Source: ESPAD 2007. Results come from logistic regression modeling. Odds of the respondents with risk behavior (cases) as compared with respondents without risk behavior (controls) are presented. Figures in are bold, when $p < 0,05$.

The results in the tables show that the most significant association is found between the studied forms of risk behavior and satisfaction with respondent's relation to mother. The worse is the relation with mother, the higher risk of damaging health behavior can be expected. The results confirm a strong influence of mother-child relations and dependence on social support, while the relation to father seems to play a slightly lesser role (Piko 2000). The evidence shows that interpersonal peer influence and role modelling are significant determinants of smoking among adolescents (Griesler, Kandel 1998), when the higher satisfaction with their relation with friends correlates to more binge drinking and stronger smoking.

4. Conclusion

It is obvious that current young people report increasing trends of risk behaviors including substance use and abuse and a certain loss of traditional values as a result of complicated relations within the current transformation society. The results within this paper also documented the importance of the family background and the social support of the family members related to the health behavior. In the context of the contemporary crisis of the role of the family within the society, it is obvious that the worsening of relations and weakening of family ties leads to more risky behavior. The paper focused on this trend, tried to find an explanation for this drop in the quality of life of young people. It calls for a complex strategy of prevention including not only the risk behavior prevention, but a gradual change in the prevention of leisure activities and quality of life of young (mainly urban) people. They have to be offered widely accessible counseling services for young people without strong family support or enough of opportunities to spend their leisure time in a healthy social and physical environment.

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